



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
PESTICIDES AND TOXIC SUBSTANCES

JUN 21 1985

MEMORANDUM

SUBJECT: PP# 4E3146. (RCB #1028). Permethrin on Avocados and Papayas. Amendment of 4/19/85. (No accession number).

FROM: Linda L. Kutney, Chemist *Linda L. Kutney*  
Tolerance Petition Section III  
Hazard Evaluation Division (TS-769)

THRU: Karl Arne, Acting Section Head *Karl Arne*  
Tolerance Petition Section III  
Residue Chemistry Branch  
Hazard Evaluation Division (TS-769)

TO: Hoyt Jamerson and Gene Asbury (PM-43)  
Registration Division (TS-767C)

and

Toxicology Branch  
Hazard Evaluation Division (TS-769)

In our review of November 23, 1984 (L. Kutney), we said that before a favorable recommendation could be made for the proposed tolerance of 1 ppm for residues of the insecticide permethrin [(3-phenoxyphenyl)methyl 3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylate] and its metabolites 3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylic acid (DCVA) and (3-phenoxybenzyl)methanol (3-PBA) in or on avocados and papayas, Section B would need to be revised.

We recommended that the proposed label in Section B for avocados and papayas be revised to preclude both the grazing of livestock in treated areas and the feeding of cover crops from treated areas to livestock. This restriction is necessary to preclude the possibility of secondary residues in meat, milk, poultry and eggs.

The petitioner has submitted a revised label which includes these restrictions. We consider this matter resolved.

We also recommended the proposed label in Section B be revised for avocados and papayas to give the dosage rate on the label both in terms of "lbs active ingredient (a.i.) per acre" and "lbs. a.i. per 100 gal. in a dilute spray to run-off," to account for variation in tree size.

The petitioner has responded by stating, "It is requested that the application rate on the original Section B be left as is. We are concerned about the possibility of an overtreatment if the ai/100 gallons was specified. It may be that a grower could apply 100, 200 or more gallons per acre. It is more reasonable to state lb. ai/A. By stating rate only in lb. ai/A, there would be no confusion on the part of the applicator; gallons/A could be adjusted while the amount of ai/A would remain the same."

We continue to recommend that the proposed label in Section B be revised for avocados and papayas to give the dosage rate on the label both in terms of "lbs active ingredient (a.i.) per acre" and "lbs. a.i. per 100 gal. in a dilute spray to run-off." The additional label "lbs. a.i. per 100 gal. in a dilute spray to run-off" is necessary to account for variation in tree size; this labeling is specifically intended to ensure that small trees do not receive a higher dosage and therefore higher pesticide residues than average or large sized trees. This deficiency is not resolved.

We also concluded in our earlier review that residues in papayas are not expected to exceed the proposed 1.0 ppm tolerance under the proposed conditions of use in Florida. We recommend, however, that either additional residue data be submitted from Hawaii for papayas (because Hawaii is a major producer of papayas) or that a geographical restriction limiting use of permethrin on papayas to Florida be included in an amended Section B, due to lack of data from Hawaii.

The petitioner responded by stating that, "Appropriate geographical restrictions for papayas are included on the revised Section B." The revised Section B includes the additional restriction, "Based upon available residue data, the use of Ambush® on papaya is limited to Florida and Puerto Rico."

We reiterate our previous conclusion that either additional residue data be submitted from Hawaii for papayas (because Hawaii is a major producer of papayas) or that a geographical restriction limiting use of permethrin on papayas to Florida be included in an amended Section B, due to lack of data from Hawaii. As an alternative additional data from Puerto Rico may be submitted, at the maximum proposed rate of application, to allow a geographically restricted use in Puerto Rico as well as Florida.

#### Recommendations

We continue to recommend against the proposed tolerance for residues of permethrin and its DCVA and 3-PBA metabolites (1.0 ppm) resulting from the use of permethrin on avocados and papayas.

For further consideration, the petitioner should submit additional data from Hawaii or, alternatively, submit additional data from Puerto Rico to allow a geographically restricted use in Puerto Rico as well as Florida. In either case the data should reflect the maximum proposed rate of application. The proposed label and Section B should then be revised accordingly.

In addition, we continue to recommend that the proposed label in Section B be revised for avocados and papayas to give the dosage rate on the label both in terms of "lbs active ingredient (a.i.) per acre" and "lbs. a.i. per 100 gal. in a dilute spray to run-off." The additional label "lbs. a.i. per 100 gal. in a dilute spray to run-off" is necessary to account for variation in tree size; this labeling is specifically intended to ensure that small trees do not receive a higher dosage, and therefore higher pesticide residues, than average or large sized trees.

No change in tolerance has been requested. A Codex sheet is attached to the original submission.

TS-769:RCB:L.Kutney:CM#2:Rm710:X73043:6/13/85

cc: R.F., Circu, Kutney, TOX, EEB, EAB, PP#4E3146, FDA,  
Robert Thompson PMSD/ISB (Bill Grosse)

RDI: Arne, 6/17/85; Schmitt, 6/17/85